

DESCRIPTION OF A NEW SPECIES OF GALAXIAS FROM MOUNT
WILSON, WITH REMARKS ON THE DISTRIBUTION OF THE GENUS.

BY WILLIAM MACLEAY, F.L.S., &c.

GALAXIAS COXII,

B. 7. D. 10. A. 11. V. 7. P. 12.

Height of body one-sixth of the total length; length of head about one-fifth of the same. Head broad and depressed between the eyes. Eyes about one-fifth of the length of the head, and less than half their diameter distant from the mouth. Mouth large and slightly oblique, the maxillary extending to below the middle of the orbit. Teeth in the jaws in a single row, acute, rather distant and interspersed with a few of larger size; those on the palate in a series of about seven on each side of a central longitudinal ridge, and those on the tongue in two series of strong, acute, slightly hooked teeth, five or six in number, separated by a very deep longitudinal groove. The pectoral and ventral fins are about the same length, and have a pointed look owing to the middle rays being the longest; the dorsal and anal are about equally long, the latter commencing opposite the middle of the former; the caudal is truncated and is rather broad and spreading. The colour in the fresh specimen is greenish olive, spotted all over with dark brown, the spots towards the tail sometimes coalescing so as to look like "fasciæ," the belly is yellowish, there is a large oblong black spot behind the operculum just above the base of the pectoral fin. All the fins are of a beautiful reddish-pink colour tipped with black.

Three specimens, seven inches long.

I am indebted to the Honble. E. K. Cox, M.L.C., for the specimens from which the above description is taken. They were taken by him from a small rivulet on or near the summit of Mount Wilson. The height of the mountain is about 3,500 feet

above the sea, and the rivulet takes its rise in a spring on its summit, and forms, in its short course before it leaps into the Grose Valley, lying about 2,500 feet below, a series of small shady cool pools, at different elevations, which are the abodes of this fish. The species has never, I believe, been found in the Grose River or any of the tributaries of the Nepean and Hawkesbury, and I think we may safely take it for granted that it is not to be found in them, as the Nepean and its tributaries were very closely searched some years ago by Mr. Krefft, when investigating the fresh water Fishes of Australia.

The fall into the Grose Valley may probably be too precipitous to admit of even the ova of the Fish reaching the river in safety, but there is another mode of accounting for the absence of this Fish in the lower portions of the stream in which they have been found, and that is in the difference of temperature. The difference between the shady pools on Mount Wilson and the exposed and shallow pools of the Grose or Nepean Rivers must be immense, and it may well be, that the Fish cannot survive the great change of temperature. The genus *Galaxias* is in this respect very remarkable. It is peculiar to the rivers flowing into the Pacific south of the tropics, and apparently becomes more abundant as the colder latitudes are reached. It is rare in the rivers of New South Wales, more abundant in Victoria, still more so in Tasmania and New Zealand, and is found in the rivers of southern Chili, Magellan Straits, and the Falkland Islands.

The species described up to the present time are as follows:—
G. alepidotus, Forst., Cuv. and Richards=*Forsteri*, Cuv. and Val.

New Zealand.

„ *truttaceus*, Cuv. and Val., Richards. Van Diemens Land.

„ *olidus*, Gunth. ? Queensland.

„ *fasciatus*, Gray, Cuv. and Val., Richards,=*brocchus* and *reticulatus*, Richards. New Zealand and Auckland Islands.

„ *attenuatus*, Jenyns, Cuv. and Val.,=*scriba* and *maculatus*, Richards. New Zealand, Van Diemens' Land, Falkland Islands and the Southern parts of Chili.

- G. Krefftii*, Gunth., Cat., p. 211. Sydney, Murray Rivers.
 ,, *scriba*, Cuv. and Val. Port Jackson.
 ,, *maculatus*, Jenyns, Cuv. and Val. Tierra del Fuego.
 ,, *alpinus*, Jenyns, Lakes, Tierra del Fuego.
 ,, *punctatus*, Gunth., Cat. p. 212. Eastern Creek, N. S. Wales.
 ,, *brevispinis*, Gunth.=*grandis*, Von Haast. Lakes Coleridge
 and Guyon, N. Z.
 ,, *gracillimus*, Canest. Chili.
 ,, *Waterhousei*, Krefft. South Australia.
 ,, *ocellatus*, Casteln. River Yarra.
 ,, *versicolor*, Casteln. In Marsh St. Kilda, Melbourne.
 ,, *cylindricus*, Casteln. Lower Yarra, Melbourne
 ,, *delicatulus*, Casteln. Yarra River.
 ,, *amænus*, Casteln. Yarra River.
 ,, *ornatus*, Costeln. Cardinia Creek, Victorian.

These in addition to the one (*Coxii*) now described are all that can be recognised as species with any certainty. Three others have been named as coming from South Australia—*G. obtusa* and *rostratus*, by Klunzinger in the "Arch fur Natur," 1872, p. 41. and *G. Schombergii*, by Peters in the "Monath. Ak. Wiss. Berlin," 1868, p. 455, but as these publications are not procurable here, and as the authors alluded to have not thought it necessary to send a copy of their Papers to any of the scientific Societies of these Colonies, they cannot be aggrieved if they find their work necessarily ignored.

The species I have now described is the largest I have seen, but I have no doubt that an examination of the rivers rising in the Snowy Mountains, such as the upper waters of the Snowy River would make us acquainted with even larger species.

The general name given to all the species of *Galaxias* is "Trout," more I should think from their spotted appearance than from any actual resemblance, but like the trout they are good for the table, and I feel pretty confident they would yield good sport to the angler.